



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,418	10/27/2003	Stojan Stojanovski	SSX-116-A	1916
7590 06/24/2004			EXAMINER	
Charles W. Chandler, Attorney 33150 Schoolcraft Livonia, MI 48150			ROSS, DANA	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,418	STOJANOVSKI, STOJAN	
	Examiner	Art Unit	
	Dana Ross	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

There appears to be a problem with the letter “e” in several places in the disclosure.

Applicant is referred to page 2, line 2 (together); page 4, line 1 (the, are, opposite), page 4, line 2 (respect); page 5, line 1 (there), page 5, line 2 (seat, end); page 6, line 1 (connects).

Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “122”, figure 6, has been used to designate both “hexagonal opening for wrench” and “smooth portion” (see disclosure, page 5, lines 16-18). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show reference numbers 35a and 35b as described in the specification (see page 3, lines 22-23 and page 4, lines 20-22). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are

Art Unit: 3722

required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 3, reference numbers 47 and 49. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

Art Unit: 3722

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Lead lines are not shown on figure 6 for reference numbers 116 and 22. Lead lines are required for each reference character except for those which indicate the surface or cross section on which they are placed. Such a reference character must be underlined to make it clear that a lead line has not been left out by mistake (See 37 CFR 1.84(q)(h)(3)).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 12 and 16, recites the limitation "the threaded bore of the tool holder".

There is insufficient antecedent basis for this limitation in the claim.

Claim 1, lines 12 and 13, recites the limitation "the threaded bore of the spindle". There is insufficient antecedent basis for this limitation in the claim.

Claim 1, line 15, recites the limitation "the internally threaded bore of the spindle". There is insufficient antecedent basis for this limitation in the claim.

Claim 1, lines 20-22 recites the limitations "the radially expandable collar", "the expandable collar" and "the tool holder collar". There is antecedent basis for a "radially expandable collar" in line 10. It is not clear if there are three collars being claimed. Also, there is

Art Unit: 3722

insufficient antecedent basis for the limitations of “the expandable collar” and “the tool holder collar” in the claim.

Allowable Subject Matter

5. Claim 1-8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

6. Claim 9 is allowed.

7. The following is an examiner’s statement of reasons for allowance of claim 9 and a statement of reasons for the indication of allowable subject matter in claim 1: The prior art of record neither anticipates nor renders obvious a tool holder apparatus comprising an elongated spindle adapted to rotate about a turning axis and an elongated tool holder with an externally tapered shank to receive the tapered spindle opening in the spindle as claimed, specifically with a camming structure on a screw engageable with a radially expandable collar of the tool holder to expand the collar to engage and wedge the tool holder shank in the spindle for a cutting motion.

The closest prior art of record is U.S. Pat. No. 5,971,681 (Wolfe et al., hereafter referred to as ‘681) and U.S. Pat. No. 4,856,944 (Reinauer, hereafter referred to as ‘944) and U.S. Pat. No. 5,447,485 (Bory et al., hereafter referred to as ‘485).

‘681 teaches a tool spindle 10 and tool holder 22 that has a tapered drive shank 24 to seat in the socket 12 so the tool holder is driven by the spindle 10; both the spindle and tool holder with threaded bores holding a drawbar bolt 18 that connects the tool holder and spindle (fig. 1, col. 2, lines 18-22 and lines 33-40).

‘681 does not teach the tool holder having a radially expandable collar adjacent the shank or a camming structure on the screw engageable with the radially expandable collar of the tool

Art Unit: 3722

holder to expand the collar to engage and wedge the tool holder shank in the spindle for a cutting motion.

Therefore '681 does not anticipate the claimed invention of claims 1 or 9.

'944 teaches a tool support 1 and tool head 2 for holding tools (fig. 1A, col. 2, lines 46-62), with a bolt 10 and with threaded sides 10a and 10b and a section 10c for insertion into an expanding part 6 of the tool support (fig. 1A and 1B, col. 3, lines 36-57).

'944 does not teach the tapered features of the tool holder or spindle, or the tool holder and spindle connection for wedging the tool holder shank in the spindle for a cutting motion.

Therefore '944 does not anticipate the claimed invention of claim 1 or 9.

'485 teaches a differential screw 14 for connecting a tool 10 with a device 10.

'485 does not teach the elongated spindle having an internally tapered opening at one end connected to an elongated tool holder with an externally tapered shank for receiving the spindle or the camming structure on the screw engageable with a radially expandable collar of the tool holder to expand the collar to engage and wedge the tool holder collar in the spindle opening for a cutting motion.

Therefore '485 does not anticipate the claimed inventions of claim 1 or claim 9.

Furthermore, there is no prior art of record found that would render obvious the claimed invention of claim 1 or claim 9, and no motivation to combine '681, '944 or '485 to obtain the claimed invention, and furthermore, doing so would destroy the teachings of each invention.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 3722

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 703-305-7764. The examiner can normally be reached on 7:00 to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 703-308-2159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmr


A. L. WELLINGTON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700